

Addressing the Solid Wastes of the Desert Rock Power Plant

CLEAN AIR **TASK FORCE**

Statement of Jeff Stant, Director, PPW Project — Safe
Disposal Campaign, for the October 4
US EPA Hearing on the Prevention of
Deterioration Per



U.S. coal-fired power plants
generate 125 million tons of
Coal Combustion
Waste
EVERY YEAR.

This waste would fill the box
cars of a train stretching
from Washington D.C. to
Melbourne, Australia.

CCW IS TOXIC

- Has toxic levels of 17 heavy metals and trace elements such as **arsenic, selenium, mercury, cadmium, chromium, lead and boron** as well as sulfates, chlorides and other salts. (Wu, 1987) (Boulding, 1992) (Carlson, 1993) (US EPA, 1988, 1999, & 2000)
- Can cause **birth defects, cancer, neurological damage**, extirpates local populations of fish and amphibians, causes wide-scale ecosystem damage. (Cherry, 2000) (Rowe, 2001) (Hopkins, 2006) (Lemly, 1993, 1999, 2004) (US EPA 1998)
- Risks to people living near CCW sites can **exceed EPA cancer thresholds by 1000 times or more**. Cancer risk for adults and children drinking groundwater contaminated with arsenic from CCW estimated as high as 1 in 100, **10,000 times higher** than EPA's regulatory goal for reducing cancer risk. (US EPA, 1998)
- **Poisons drinking water, harms crops and has harmed & killed livestock in the Four Corners Region.** (NRC, 2006) (US EPA, 1988, 1999, 2000) (Carlson, 1993) (ALBUQUERQUE JOURNAL, 1999)

**Four Corners Is Already
The Largest Coal Ash
Minefilling Site in the
United States**

Coal Ash and Scrubber Sludge Dumped in the San Juan and Navajo Mines since the early 1970s.

- San Juan Mine – 40 million tons
- Navajo Mine – 55-60 million tons

*These are approximate estimates of what these mines have received based on testimony of Public Service New Mexico, Arizona Public Service, and BHP Minerals at hearings of the National Research Council's Committee on Mine Placement of Coal Combustion Wastes, Dec. 6 & 7, 2004 in Farmington, NM

CCW at Four Corners Causes Fugitive Emissions

- Ash and scrubber sludge dry out in uncovered mine pits. (NRC Tour of San Juan and Navajo Mines, BHP Minerals Presentation, Dec. 7, 2004)
- Ash and scrubber sludge is not covered in the dump next to the Four Corners Power Plant.
- This ash and scrubber sludge becomes airborne on windy days.

Four Corners Ash Dump on a Still Day



Four Corners Ash Dump on a Windy Day



Desert Rock will generate A LOT of Ash and Scrubber Sludge

- Each 750 MW Unit will produce approximately 538,740 tons of fly and bottom ash every year. (Derived from Application for Prevention of Significant Deterioration Permit, SteagPower, LLC, May 2004, p. 2-9, Table 2-2, Fuel Data for Main Boilers, Design Fuel Ash Content of 20.5% x 300 tons of coal burned/hour/unit x 2 units)
- Wet scrubbers will produce a large additional volume of gypsum sludge. (page 2-10, Application)
- “Solid wastes produced by the combustion of the coal and the air pollution control system will be returned to the mine.” (page 2.1, Application)

Breathing Ash is Harmful

- Numerous studies document severe cytotoxic effects in the lung cells of animals inhaling fly ash dust. The dust alters lung and liver tissue structure and kills or harms the alveolar macrophages, cells that protect against infection. (Aranyi, 1978)
- Toxic metals concentrated in inhaled fly ash are readily transferred to other organs in animals. (Chauhan, 1986) (Srivastava, 1984)
- Inflammatory interleukin-8 levels (causing damage) increased in human lung epithelial cells exposed to fly ash by as much as 8 times. (Smith, 1999)
- Smaller particles prevalent in fly ash (below 1 micron) present the greatest inhalation hazard. (Aranyi, 1978) (Smith, 1999)

High pH makes dust MORE HARMFUL.

- Exposure to high pH dust from the collapse of the World Trade Center has caused major public health problems.
 - “Exposure to dust with a high pH could impact everyone, but especially the very young, the very old, and those with existing pulmonary disease.” Dr. Robin Herbert, codirector, Mount Sinai Center for Occupational and Environmental Medicine, (St. Louis Post Dispatch, 2002)
 - “The dust, once its in contact with moist tissue, the throat, the mouth, nasal passages, the eyes and even sweaty skin, it becomes corrosive and can cause severe burns.” Carrie Loewenherz, industrial hygienist, New York Cmte. For Occupational Safety and Health, (St. Louis Post Dispatch, 2002)
 - “The high alkalinity of WTC dust produced bronchial hyperreactivity, persistent cough, and increased risk of asthma.” (Landrigan et al, 2004)
 - Leachate pH from coal ash and scrubber sludge dumped from existing power plants in the 4-Corners ranges from 7.5-12 units. (BHP testimony to the NRC, Dec 7, 2004) - as high as the highest pH in dust at the World Trade Center. This is as caustic as drain cleaner. Desert Rock will generate more caustic sludge and ash that will become fine dust when dry.

PSD Permit Should Address Fugitive Emissions from Desert Rock's Ash

- Additional Impact Analysis (Sec. 6.6, pp. 6-46 through 6-50, Application for PSD Permit) addresses road dust from coal hauling trucks and emissions from workers' travel.
- Exposure of humans, livestock or the environment to toxic airborne ash and dried sludge is completely unrecognized in the AIA, yet airborne dust from disposal of these materials is already a constant, visible problem in the area.
- The AIA should examine the impact of fugitive emissions from Desert Rock's CCW and include daily cover or wetting requirements and/or other mandatory, enforceable safeguards (e.g., restrictions on locations and timing of CCW placement) to prevent an increase in exposure to toxic airborne dust from the transport, storage and minefilling of ash and scrubber sludge from Desert Rock.

CCW from the San Juan and 4-Corners Power Plants is poisoning arroyos.

- Shumway Arroyo contaminated beyond all use -- Sulfate 45,000 ppm (180X SMCL), TDS >80,000 ppm (166X SMCL) in the Shumway alluvium. (Data from Mon. Wells "GL" and "GC", San Juan Mine, BHP Minerals)
- Lead, cadmium, manganese, boron, selenium, sulfate and TDS at toxic levels in the washes draining minefills in the San Juan and Navajo Mines. (Davis, 2005) (Zimmerman, 2005)
- 1400 sheep and hundreds of cattle killed by contaminated water. Drinking water wells and springs destroyed. People made ill from drinking contaminated water. Lawsuits awarded more than \$1 million in damages in the 1980s. (Albuquerque Journal, 1999)



PSD Permit should not be considered in isolation of other impacts.

- Mining for Desert Rock **destroys the ecosystem** of Navajo Lands.
- Burning coal and controlling emissions required by this PSD permit **will produce huge volumes of solid wastes that have already caused toxic damage** in waters draining the San Juan and Navajo Mines.
- Further consideration of this Permit should be postponed until these impacts are adequately addressed in the **Environmental Impact Statement** for Desert Rock.

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October 26, 2006

Dear Mr. Baker,

On behalf of the Mountain Studies Institute (MSI), I am providing comments concerning the Prevention of Significant Deterioration (PSD) permit for the proposed Desert Rock power plant. MSI is a mountain research and education institution and high-altitude field station based in Silverton and Durango, Colorado. Our work spans the Four Corners region with a specific focus on the 10,000 square mile San Juan Mountain range. MSI's mission is to enhance understanding and sustainable use of the San Juan Mountains through research and education. I have served as MSI's Research and Education Director since November, 2004.

Mountains globally and locally are facing natural and human disturbance such as land use alteration, deteriorating air and water quality, and climate change. But the information needed to understand and quantify these impacts is seriously lacking. The San Juan Mountains, with their outstanding physical and ecological diversity, are no exception. Existing scientific data are inadequate to inform community and environmental planning and decision-making. MSI serves the dual role of working with regional stakeholders to identify information needs, while directing and facilitating interdisciplinary research to fill identified gaps. It is within this context and background from which I offer comment in this letter.

I have attended an information session and read the Ambient Air Quality Impact Report for the Desert Rock PSD. In general, I believe that the PSD process is flawed, requiring the EPA to "throw out" many concerns by the public including the proposed power plant's mercury, carbon dioxide and ozone precursor emissions because they are not included in the six criteria pollutants (except for NOx). If they were included, the results of the PSD permit could be different, especially in the case of mercury. Many members of the public have commented via information sessions and in editorials their dismay that while mercury is one of the top (if not #1) air quality concerns in the USA, it is not included in the PSD permit process. Mercury deposition also is not monitored adequately in the western USA to enable detection of spatial or temporal trends, nor to model future scenarios.

Below are more specific concerns that I believe do fall within the purview of the existing PSD process.

(1) It is inappropriate for the EPA to seek comment on a PSD permit before the accompanying EIS concerning endangered species has been released from the BIA. The EPA should extend the comment period until the public and land managers can view the EIS.

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(2) I am not convinced that Class I Federal Areas will be protected.

a. Modeled emissions of SO₂ and PM₁₀ are above the Significant Impact Level. Cumulative analyses for NAAQS compliance did not include small sources where the emissions were less than 0.8D, where D=distance in km. While this is a recommended procedure by the NPS, it does not take into consideration that this area has many small sources, namely oil and gas compression engines, which together may represent a significant source. How many small sources can be omitted from the analysis before the EPA and NPS raise concern? Did the modeling analyses use all the appropriate emission sources, including sources in all neighboring states and tribal lands? Were others overlooked in addition to the small sources?

b. The permit application asserts that vegetation and soils will not be harmed in Class I areas, but I do not believe that these potential impacts were adequately researched. Federal land managers have suggested the use of critical loads to protect ecological resources on Federal Lands (Porter et al. 2005). The critical load is the “quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge” (Porter et al. 2005). In a recent article Baron (2006) uses diatom data from lake sediment cores in Rocky Mountain National Park combined with back-modeling of nitrogen emissions to hindcast 1.5 kg N/ha/yr as the critical load of inorganic N in wet deposition. This critical load is the level at which significant impacts to lake algal communities are projected to have commenced in Rocky Mountain National Park. The Park has adopted this critical load level (see letter from RMNP dated May 9, 2006 at <http://www.cdphe.state.co.us/ap/rmnp/rmnpCLLetter.pdf>).

Amounts of N in wet atmospheric deposition in several Class I Areas north of the proposed Desert Rock site are at or currently exceed this level of 1.5 kg N/ha/yr. For example, N deposition at Molas Pass near the Weminuche Wilderness Area is approaching 2 kg N/ha/yr and levels are rising (see Figure 1). It is likely that the critical load for

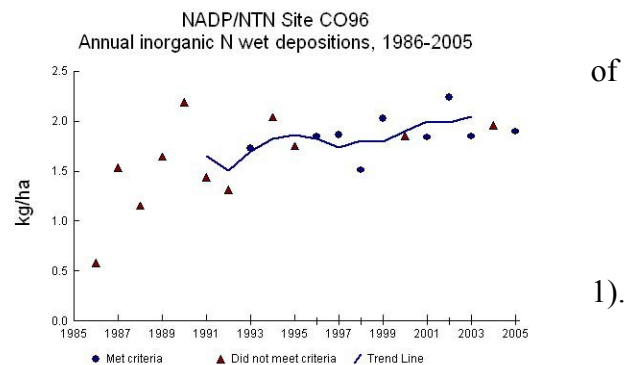


Figure 1. Annual atmospheric nitrogen deposition for Molas Pass. Graph from the National Atmospheric Deposition Program.

biological impacts to lakes are similar in the Weminuche Wilderness compared to Rocky Mountain National Park. Thus, ecological impacts deemed unacceptable by Rocky Mountain National Park may already be occurring in the Weminuche Wilderness Area. Data do not exist to prove or deny this assertion, however.

In the Ambient Air Quality Impact Report, modeled deposition of N was reported as <0.005 kg/ha, which is below the Federal Land Managers (FLM) “Deposition Analysis Thresholds”.

How were these thresholds determined? What time period is this rate for? Is it per year? per month? Who are the FLM's in this case?

In many (if not all) Class I areas near the Four Corners monitoring of vegetation and soil resources is inadequate to determine whether or not a harmful threshold has been reached. Examples in addition to potential impacts to lake biology described above include impacts to vegetation and soils via N deposition and ozone.

c) Emissions from the proposed facility could have a negative impact on Air Quality Related Values (AQRV) at Class I Areas. Specifically, the emissions could have greater than a 5% reduction in extinction values (i.e., visibility) for at least one day in 11 of 15 Class I Areas. The EPA has overlooked this problem and has allowed the proponent to enter a "side agreement" for a "mitigation option" with the US Forest Service. This is unacceptable.

In 2007, MSI will monitor mercury in precipitation, snowpack and lakes in the high country of the San Juan Mountains. This project is funded by EPA Region 8 to provide baseline data with which to compare any future changes. Unfortunately, this funding is short-term. In summer 2006, MSI began monitoring biological components of high elevation lakes in the San Juan Mountains. This project is in its infancy but is designed to provide data to understand if and how N deposition is affecting lake biology. Unfortunately, funding has not been secured to ensure that this project will continue.

I strongly suggest that if the Desert Rock facility is built, that the proponent be required to fund robust long-term monitoring programs so that actual impact to air quality and resources in the region can be detected before permanent deterioration occurs.

Thank you for taking my comments seriously in your decision process. I look forward to your reply.

Sincerely,



Koren Nydick, PhD
Director of Research and Education

Citations:

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TO: THE ENVIRONMENTAL PROTECTION AGENCY

RE: EPA's PROPOSED DRAFT CLEAN AIR ACT AIR QUALITY PREVENTION OF
SIGNIFICANT DETERIORATION (PSD) PERMIT FOR DESERT ROCK
ENERGY PROJECT

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INTRODUCTION

The San Juan Basin and Four Corners Area comprise a region that can best be viewed as a National Sacrifice Area in which rules, regulations, and statutes -- including the National Environmental Policy Act and the Clean Air and Water Acts -- are routinely circumvented and purposely twisted by government and "cooperating" agencies to maximize the profits and extend the power of a favored few. Personnel from federal departments, bureaus, and agencies routinely function at the behest of industry lobbyists as the lapdogs of corporate profiteers. Now here tonight, we have EPA administrators officiously presiding over a culture of environmental degradation that has become the premier growth industry of this region.

Unfortunately, this sort of corruption and graft is magnified in the San Juan Basin due to the unparalleled allowances and exemptions which private businesses and corporations are now afforded in joint agreements and lease arrangements with the federal and tribal governments on Indian trust lands. While corporate entities and their political conduits are empowered by such unrestrained access and influence, widespread public concerns about cumulative environmental and adverse socioeconomic impacts are routinely dismissed as irrelevant, insignificant, or "outside the scope" in federal assessments and studies of proposed projects.

Currently, Sithe Global Power, LLC, and The Navajo Nation are proposing to construct a Desert Rock Energy Project on federal tribal trust land on the Navajo Reservation. Given the Project's large size and the various other existing and proposed energy development and generation facilities in and adjacent to the Basin, a comprehensive evaluation of the Project's cumulative impacts is of the utmost necessity. Only a fool would pretend that the potential, significant, adverse impacts of a Desert Rock Energy Project are isolated and unrelated to the substantial environmental degradation and severe health problems associated with other facilities currently operating in and around the Four Corners area. And we are not here tonight to silently suffer such foolishness.

Tonight's hearing is premature, presumptuous, and an affront to the sensibilities of responsible citizens. How so? The Bureau of Indian Affairs and the Department of the Interior have not even completed a Draft Environmental Impact Statement for the Project pursuant to the National Environmental Policy Act. None of hundreds of questions and concerns voiced almost a year ago by scores of citizens and groups have been formally addressed. **No** valid purpose or need has been identified for this project. **No** reasonable range of alternatives has been seriously considered. The proponents of Desert Rock have made **no** reasonable case that the Project will not cause adverse effects to the human and natural environment. **No** meaningful mitigation strategy has been advanced to minimize Project impacts. The BIA has failed to offer timely response to community members, and now EPA has their cart before the horse. Yes, dog-and-pony-show is an apt metaphor for the official folderol we find before us here tonight. And, we, the people, are being victimized and poisoned by this process.

The release of an adequate Draft EIS on Desert Rock is an obvious prerequisite to any informed comment on this EPA Clean Air Act Prevention of Significant Deterioration (PSD) draft permit. But, we have **no** Draft Environmental Impact Statement on the proposed Desert Rock Project. What we do know is that BIA's scoping process for their Draft EIS was deliberately designed to severely narrow the range of inquiry. By restricting the scope of the Environmental Impact Statement, so as to skirt the overriding issue of cumulative impacts, the Federal Government is effectively perverting NEPA, breaching the public trust, and making a mockery of their entire decision-making process. EPA has now moved front and center to play a key role in this travesty.

It would be in everyone's best interest for EPA, Sithe, the BIA, URS, and the DinA Power Authority to slow down, back up, and at least pretend to make an honest, wholehearted effort to get it right. If the Project sponsors and their consultants are unwilling to be open with the public in assessing the cumulative impacts and human health consequences of the proposed action, if they are unwilling to give serious consideration to reasonable alternatives -- including the No Action Alternative, then they should pack up their bags and go peddle their power project elsewhere. But take note -- we do not care to have our communities further poisoned and looted by the politics of profiteers hell-bent on runaway, unsustainable growth.

SPECIFIC CONCERNS:

*** Since the get-go, Navajo residing in the proposed Project area have raised concerns that Sithe/DPA and certain Navajo Nation officials have not acknowledged an overwhelming opposition to the Project by Tribal members in the area and the rejection of the Project by local Chapter governments. Project promoters have sought to undermine all opposition by creating boundary disputes and pitting individual Tribal members and chapters against each other. Many have come to see this rightly for what it is --a classic land grab. Strong-arm tactics such as land withdrawals --finagled through the Tribal agencies-- are intended to satisfy promoters of Desert Rock and fill their international corporate coffers. The voices of tribal members who are rooted to the land are irrelevant to Sithe. We would all do well to listen closely to tribal members who are saying "**no**" to token payments for land that is their lifeblood; tribal members who are saying "**no**" to forced relocation; tribal members who are saying "**no**" to the uprooting and abandonment of their traditional ways; and "**no**" to the poisoning of their grandchildren by a third massive coal-fired power plant.

*** In its "Ambient Air Quality Impact Report" (NSR 4-1-3, AZP 04-01), as mandated by 40 CFR 124.7 and 124.8, EPA sets forth what it claims to be "the legal and factual basis for the permit conditions". EPA refers to the BIA's Draft Summary Scoping Report for the Desert Rock EIS, asserting that the public has raised only five issues of environmental justice with respect to the proposed Facility. In fact, the public's concerns about the environmental injustice of Desert Rock are much more widespread and deep-seated. But the EPA glibly states as follows:

"In response to the concerns listed above, EPA is conducting additional outreach on the PSD aspects of the proposed Facility in the form of workshops with Dine translators, radio announcements in Dine, and translations of fact sheets in Dine. The applicant has also prepared a data presentation to better characterize the issues raised in the NEPA scoping effort regarding environmental justice and EPA expects that these issues will be addressed through the NEPA process."

Did EPA's Dine translator happen to tell the people they should be honored to have their hearts ripped out so Californians can run their icemakers and Jacuzzis? The fact is that public concerns about Desert Rock remain largely ignored, and EPA's blasé characterization and gross misrepresentation of these environmental justice issues is offensive and unacceptable.

*** Reports to tribal agencies indicate that the project promoters have engaged in verbal negotiations with elderly Navajo residents who are non-English speaking and uninformed about their legal rights and procedures. As a result, valuable grazing permits held for generations have been lost. Documents have

been signed by elders without knowledge of their contents. This is immoral and illegal financial exploitation --alien to the intent and spirit of federal and state environmental justice guidelines. Community members have objected to this type of mistreatment and expressed concern that they will continue to be subjected to such harassment and deceit by Sithe and other Project promoters.

*** If the Project's promoters cannot clearly demonstrate that construction of Desert Rock will provide direct, long-term benefits to those elderly and impoverished Navajo in the proposed Project area without further jeopardizing the health and homes of their families, then this thinly veiled scheme should be seen for what it really is -- the deliberate use of cultural supremacy and economic subjugation to convert the wealth of Tribal resources held in trust into private corporate profits and increased power for an elite few at the expense of an ill-used and vulnerable minority. If only lip-service is paid to the principles of environmental justice, the oppressed will be forced to use any means at their disposal to protect their families and defend their communities.

*** Who would contract for the power generated by the proposed Project? Where are the customers, and how would the environment be impacted by the infrastructure required to transmit and market the power? How much Desert Rock electricity would be available at a reasonable rate to be used by tribal members residing closest to Desert Rock? How much would be transmitted to markets off the reservation?

*** Testimony by representatives of the BHP Corporation in connection with an air quality permit application indicated that emissions from another large coal fired power plant in the San Juan Basin would result in exceedance of significant impact levels to air quality in the proposed Desert Rock Project area. The transcript of that BHP testimony needs to be included and directly addressed within this -- EPA's Clean Air Act Prevention of Significant Deterioration (PSD) permit process.

*** The cumulative human health impacts attributable to the San Juan Basin's deteriorating regional air quality must be clearly identified. A comprehensive study of cancer rates and associated etiology needs to be conducted in an expanded Project Study Area. These results need to be published as part of the NEPA/EIS process and included in EPA's Clean Air Act Prevention of Significant Deterioration (PSD) permitting process for Desert Rock. EPA should examine connections between elevated levels of mercury in power plant emissions and the incidence of childhood autism in the San Juan Basin. The incidence and relative severity of adult and childhood respiratory illnesses such as asthma must be carefully documented and seriously weighed by EPA. Can you say "choke", "gasp", "wheeze", and "retch"? Polluted air causes a narrowing of the blood vessels, which can contribute to the risk of heart attack and stroke. Long-term exposure to air pollution also increases the threat of lung diseases such as cancer and asthma, a serious health threat for Navajo tribal members who rightly object to being exposed to further pollution from yet a third massive coal-fired plant. A study needs to be conducted to address health problems and lack of access to healthcare for tribal members in San Juan County.

*** The federal government's penchant for servicing corporate interests at the expense of public health is manifest in the flawed modeling scheme used to estimate air pollution impacts of the proposed Project. Air pollution modeling now in use simply serves as a springboard for unrestrained growth and the cutthroat-profit motives of energy extraction and power development interests in the San Juan Basin. Throughout the Project Study Area, current air pollution monitoring techniques are inadequate, intentionally haphazard, and deliberately deceptive. This would be laughable if it was not so tragic. Such bad-science modeling generates data driven by preordained results rendered in deference to the agenda of the Basin's energy extraction and power production industries. Is there anyone here so naive as to actually believe that public input will be taken seriously in this EPA process, when it is common knowledge that industry executives are joined at the hip to top government agents and officials who routinely provide cartes blanches to corporate energy interests? Does EPA have to do business by distorting objective scientific knowledge for political ends and then misrepresenting or even withholding the facts from the public at large?

*** Your agency is mandated to ensure air quality protection to mandatory Class 1 Federal impact areas. Sithe's own modeling indicates Bandelier NM, Mesa Verde NP, Canyonlands NP, Petrified Forest NP, San Pedro Parks WA, and Weminuche WA could be subject to significant negative impacts should Desert Rock be permitted. Before the San Juan Basin's air becomes even murkier, an accurate cumulative visibility analysis must be completed and made available to the public for review. When will this be done and how will the results of the study be disseminated?

In its Ambient Air Quality Impact Report, EPA states:

“For Class I areas, Sithe's modeling showed that the emissions from the Facility could potentially have an impact on an Air Quality Related Value (AQRV). Specifically, Sithe's modeling indicated that the Facility's emissions would result in greater than 5% extinction of visibility on at least 1 day at 11 of the surrounding 15 Class I areas. The [three] Federal Land Managers requested Sithe to perform additional modeling. Sithe performed several rounds of additional modeling to evaluate if the Facility's emissions would have an adverse impact on Class I area visibility. On April 25, 2006, the United States Forest Service (USFS) sent a letter to EPA referring to a "mitigation strategy" that Sithe had proposed to the FLMs. The USFS letter indicated that Sithe's performance of the mitigation strategy would be sufficient to alleviate its concerns about visibility. The USFS letter requested EPA to include the mitigation strategy in Sithe's PSD permit so that Sithe's proposal would be federally enforceable. EPA had subsequent discussions with the FLMs to explain EPA's preference for the mitigation strategy to remain in a side agreement between Sithe and the FLM rather than in Sithe's PSD permit. We understand that Sithe and the FLMs are continuing to discuss appropriate mechanisms other than the PSD permit to memorialize Sithe's commitment to perform the mitigation strategy. Accordingly, EPA has concluded it is appropriate to propose approval of the PSD permit while Sithe and the FLMs continue to discuss memorializing Sithe's commitment to perform the agreed upon mitigation strategy.”

EPA must make public the letter from the USFS under the Freedom of Information Act. Furthermore, the EPA should explain how the public interest will be best served by endorsing a so-called “side agreement” for the performance of a mandatory mitigation strategy by Sithe. Any significant damage by Sithe to Class 1 Federal areas (including wilderness areas, parks and monuments) must be treated in a mitigation strategy within EPA's Draft Clean Air Act Prevention of Significant Deterioration (PSD) permit. EPA should stop trying to sidestep the issue of mitigation and add strong teeth in the Desert Rock Draft permit.

*** Impacts of the Project to water quality and supply must be fully determined. Sithe has stated that the Project will deplete 4500 AFY of New Mexico's groundwater from the Morrison Aquifer at a rate of 100 percent with zero return flows to the San Juan River Basin. What are the associated potential impacts of the Project to water quality (TDML) and to the endangered fish species' habitat along the San Juan River? How will Sithe's water mining impact native flora and fauna? To what extent might cavitation impact cultural and archaeological resources in the Basin? To what degree would existing water wells be impacted and how might historic uses be impaired? EPA must examine unresolved San Juan Basin water rights and claims to water, settlements, and adjudication proceedings.

*** In addition to Desert Rock, a long list of energy development proposals in the Basin includes over 12,000 new coal-bed methane and oil and gas wells, the Peabody Mustang Power Plant, and a Ute Mountain Ute power generation facility. If the Desert Rock Project were considered in conjunction with these other new and proposed major sources of air pollution, the picture would be one of further significant air quality degradation incompatible with specific provisions and goals of the Clean Air Act. In other words, we are talking not about the promise of Clear Skies, but about the prospect of additional tons of airborne filth and carcinogens, showered over the populace like manna by an amoral Administration run amok. The bottom line is that if serious, full consideration is not given to the cumulative impacts of federally sanctioned projects in San Juan Basin, any issuance by EPA of a Clean Air Act Prevention of Significant Deterioration (PSD) permit for Desert Rock ought to be embossed with an official seal certifying the San Juan Basin as a permanent National Sacrifice Area.

*** Disraeli was right in his observation that there are “lies, damn lies and statistics”. There is concern that the Cumulative Increment Analysis presented by Sithe in connection with its May 2004 application is fundamentally and fatally flawed. Sithe’s claim to credit allowances for what are in reality inapplicable emission reductions at San Juan and Four Corners power plants is unjustifiable and proscribed. Overall, discrepancies and deficiencies in Sithe’s assumptions, methodology and data necessitate that the Cumulative Increment Analysis be rejected by EPA, redone, and completed so as to provide reliable and valid results. Peer review must be incorporated within this process.

CONCLUSION

The Farmington Daily Times reported in December 2004 that the anger of many citizens commenting at the BIA’s Desert Rock scoping hearing was palpable. Much of this outrage is justifiable because it stems from a recognition in the minds of public citizens, Indian and non-Indian, both on and off the reservation, that they are being viewed simply as a nuisance, that their concerns are insignificant, and that their participation in the process --while a necessary evil-- is wholly irrelevant to the final, preordained outcome of the NEPA process. Now EPA has demonstrated that the Department of the Interior has no corner on the market of corruption and hypocrisy.

As Derrick Jensen stated at Fort Lewis College a few months ago, “When hope dies, action begins.” So, I won’t pretend to hope that my comment will be weighed with thoughtful consideration; I won’t pretend to hope that EPA’s decision regarding Desert Rock will be based on the consent of the governed and, not, as has so often been the case, an arrogant and willful contempt of the governed.

October 26, 2006

To: Robert Baker
EPA Region 9
San Francisco, CA

From: David Wegner and Nancy Jacques

Subject: Comments on Permitting of Desert Rock Energy Facility

General Comments: The proposed project to build a 1,500-megawatt coal-fired power plant has not been justified as needed. Present and predicted needs for power in this region has not been documented nor supported. If this is a project being built on "speculation" the bar by which it is evaluated should take into consideration how the impacts from the development are distributed. It appears from the literature provided by Sithe that the proposed market for the capacity and energy from Desert Rock is not in the project impact area but instead is far removed. In reality then we are going to reap the results of decreased air, water, health, and ecosystem impacts while those far removed from the area will benefit by the power produced. This does not seem fair especially when one considers that the profit generated by the project will quite likely go to power brokers not in the region. We pay both in terms of reduced environmental and health quality while those far removed get the profits and the power. *(This is allegedly a Navajo project, and they're the ones who are supposed to be benefiting, so I'd remove that statement or stick with the inappropriateness of speculation, despite who it's benefiting. Until other power plants are zero emissions, , the accumulative effect here for speculation is unwarranted.)*

Technical Issues:

1. Cumulative Impact Assessment must take into account the impacts of the other coal fired plants in the region. While Desert Rock and EPA make a valid point that they cannot be blamed for other power plants, it is incumbent upon our government to ensure that ~~the addition of~~ any additional power plants do not negatively impact the air and water quality of the ~~air-shed~~ region.
2. Air flow patterns and drift of particulates north into Colorado will impact watersheds and species that are removed from the immediate project area. The determination of potential impacts to these watersheds on a seasonal basis was not adequately discussed in the EPA modeling approach. Looking at average conditions does not accurately depict what is likely to occur.
3. Issuing a permit before construction allows the Contractor to avoid follow-through. What incentive is there to do the right thing? The permit should be held "in abeyance" until the company complies with all permit issues including all construction and monitoring and fund establishment requirements.

4. Seasonal impacts of air quality. Winter and summer wind distribution patterns vary in the project area. The differences between seasons, especially the winter seasons when air density is highest and has the greatest potential impact to the populace, ~~Specific seasonal differences~~ should be identified and discussed.
5. Plant should be "Zero Emission" in order to protect the resources and health. Let the company distribute the costs for zero emissions to the people who purchase the power from Desert Rock. Set a standard and example of what can be done to minimize the impacts to increased particulate matter and CO2 generation.
6. 638 Contracts: Will 638 contracts be utilized in the construction of the proposed Project, and how might 638-contracting drive up Project cost estimates and the ultimate cost of the Project? This has been the case for the Animas La Plata Project where the use of 638 contracts has been used by the Department of Interior to blame the cost of over a 50% increase in project costs. Who will bear the brunt of the extra costs that will inevitably come from the use of 638 contracts?
7. Emissions from another large coal fired power plant in the Basin will result in exceedance of significant impact levels. The cumulative impacts need to be adequately addressed in context of the entire air quality picture of the Southwest.
8. *Mercury?*

NEPA Process Issues:

1. EIS Process being handled by BIA. This is of concern due to lack of experience by BIA in handling a large complex NEPA process and having the proper technical expertise in air modeling interpretation to perform an adequate job.
2. Feedback Loops and Permitting Follow-up have not been articulated. Who is going to watch to ensure that Desert Rock follows the law? What will happen if they do not follow the requirements of the permit? Who has the clout to shut them down or make them adhere to their agreements? The government has limited ability due to political constraints. *(And the Navajo Nation is sovereign, and it's there, right?)*
3. Monitoring Programs Need to be Upfront, Integrated and Funded. A commitment should be guaranteed by establishing an independent fund for monitoring and research. The company can not be trusted to do the monitoring. An independent group should be hired from the environmental fund to perform the scientifically valid monitoring program.
4. Biological Assessment and Opinion. Who will develop the Biological Assessment? The Biological Assessment has to include potential impacts to watersheds and species removed from the Desert Rock site and perform a scientifically credible job in identifying, evaluating and

assessing the cumulative and seasonal impacts related to particulate matter and reduced air and water quality.

5. Health Impacts to population? Who will pay for increased problems related to decreased air quality? A fund should be established to cover these costs.
6. Purpose and Need: The purpose and need for the Project have not been adequately analyzed or established.
7. Economic Issues: What percentage of anticipated annual Project revenues will go to Sithe? What percentage of revenues generated will go to the Navajo Nation Power Authority? Of those revenues realized by DPA, what percentage will be tribal and what percentage will go to the non-tribal entities of the DPA?
8. Distribution of Power: Who will make use of the power generated by the Project? How much will be used by Navajo Nation tribal members? How much will be marketed off the reservation? Is there a defined need for this power when there is a surplus of capacity and energy on the market now?
9. Allocation of Costs. Who pays for? How much of the projected \$6,000,000 cost of the Project (including the cost of water development and delivery) will be borne by Federal taxpayers?
10. Geographic Project Area: The Project Study Area has been arbitrarily restricted and narrowly limited in size. How were the parameters of the Project Study Area defined and who made this determination? The Project Study Area must be expanded to include (at a minimum) the downwind areas of Durango, Colorado and the Albuquerque/Santa Fe, New Mexico corridor.
11. Cumulative Impacts – Health Issues: The individual and cumulative human health impacts attributable to the Basin's deteriorating regional air quality must be clearly identified. A comprehensive study of cancer rates and associated etiology needs to be conducted in an expanded Project Study Area, and the results need to be published as part of the NEPA process. Other cumulative health impacts associated with current air pollution levels must be identified and assessed. The incidence and relative severity of childhood respiratory illnesses such as asthma must be carefully documented.
12. Water Quality and Ecosystem Impacts: Impacts of the Project to water quality and supply must be fully determined. Sithe has stated that the Project will deplete 4500 AFY of Basin surface water at a rate of 100 percent with zero return flows to the San Juan River. A scientifically valid discussion of Basin water rights and claims to water, settlements and adjudication proceedings must be included in the scoping process. What are the associated potential impacts of the Project to water quality (TDML) and to the endangered fish species' habitat along the San Juan River? If ground water is to be tapped, to what extent might withdrawals impact cultural and archaeological resources in the Basin?

13. Cumulative Impact – Visibility: An accurate cumulative visibility analysis must be completed and made available to the public. The assumptions made in running the models must be identified and addressed in relation to the quality of the modeling efforts.
14. Cumulative Impact – Planned and Proposed Projects: In addition to the Desert Rock Project, the long list of energy development proposals in the Basin includes over 12,000 new coal-bed methane and oil and gas wells, the Peabody Mustang Power Plant, and a Ute Mountain Ute power generation facility. If the Project is properly considered in conjunction with these other new and proposed major sources of air pollution, the result would be significant air quality degradation incompatible with specific provisions and goals of the Clean Air Act.
15. Environmental Justice: The Navajo population will be directly impacted by the construction of Desert Rock. Any impacts to individual property, health, ability to make a living that are related to the construction and operation of Desert Rock should be compensated. The Navajo Nation should not be the recipient of any funds, individual should be the recipients. An independent and open Trust Fund should be established and funded by the company in concert with the permit to ensure that environmental justice issues are taken seriously.
16. Unclear how the BIA/EIS process will integrate the EPA permit. By issuance of a permit, it is unlikely that the EIS process will do anything but rubber stamp the permit. To do otherwise would open the BIA and EPA to potential lawsuits from the power company. That said, the intent of the NEPA process to make a non-biased evaluation is violated.

Permit Issues:

1. Should include clauses to ensure that more than minimal monitoring takes place. Monitoring should occur throughout the air shed and be funded by the power company.
2. A transparent and open monitoring process should be developed with annual reports to the people of the air shed. An annual meeting should be included for discussion and dissemination of information throughout the air shed.
3. A science based adaptive management program should be implemented to ensure that if negative results are shown from the monitoring program that changes can be made in real time by the company.
4. A fund should be established to assist in covering health issues related to degraded air and environmental quality. This fund should be set up and maintained independently from the Power Company. The distribution would be based on specific medical evidence that impacts are related to degraded air quality.
5. Monitoring of the power plant operations needs to include documentation of specific tracers that are unique to the Desert Rock

facility. Essentially establishing from the beginning a “Desert Rock DNA tracer” that will specifically be related to the facility.

6. Permitting should be based on predicted worst case scenarios rather than average conditions. It is the extremes that impact the populations and ecosystems, not average conditions.



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TO: United States Environmental Protection Agency
Robert Baker, Air-3
U.S. Environmental Protection Agency
75 Hawthorne St., San Francisco, CA 94105
desertrockairpermit@epa.gov

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FROM: Environmental Law Society & Native American Law Students Association
University of New Mexico School of Law
1117 Stanford NE
MSC11 6070. 1 University of New Mexico
Albuquerque, NM 87131-0001

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October 25, 2006

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The Environmental Law Society and Native American Law Students Association of the University of New Mexico School of Law want to express important concerns that need to be addressed prior to the issuance of the PSD air quality permit to Sithe Global Power for the Desert Rock Energy Facility. We request that the permit not be issued until the following concerns have been addressed and a public hearing has been held in Albuquerque, New Mexico, to fully inform the public of EPA's consideration and resolution of these concerns.

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Monitoring Ozone Concentrations

The EPA failed to require on-site preconstruction monitoring of ozone concentrations at the proposed Desert Rock site, even though the source would qualify as major for volatile organic compounds and nitrogen oxides – both ozone precursors. The plant would have the potential to emit 166 tons per year of volatile organic compounds and 3,315 tons per year of NOx. EPA does not even mention ozone impacts in its Ambient Air Quality Impact Report for the proposed Desert Rock power plant. This is a major oversight and the permit must not be issued until this significant public health issue is addressed.

Mercury Concentrations

The highest nationwide atmospheric mercury concentration in 2001 was measured in New Mexico. The mercury emissions from Desert Rock are likely to be much higher than projected since EPA has failed to require any add-on mercury controls or to specify any mercury emission limit at Desert Rock. As a result, Sithe is not required to meet 80% control.

Visibility Impacts

The EPA must not issue a permit for Desert Rock when, based on currently accepted procedures for assessing visibility impact, it would adversely impact visibility at Class I areas. It appears that the US Forest Service and possibly other Federal Land Managers have negotiated a mitigation plan to address Desert Rock's visibility impacts. It is not acceptable that the EPA has not proposed to include the mitigation plan as part of the PSD permit nor has EPA even provided the details of the plan to the public. The EPA has an obligation under the Clean Air Act to prevent any future impairment to visibility in any Class I area, especially for a source such as Desert Rock that will be located on Navajo Nation land where there are no tribal visibility protection regulations in place.

Regulation of Greenhouse Gas Emissions

The Desert Rock power plant could emit 13.7 million tons of carbon dioxide to the air each year from the coal-fired boilers alone. The EPA has a responsibility to regulate CO2 and other greenhouse gas emissions under the Clean Air Act. EPA's Ambient Air Quality Impact Report for the proposed Desert Rock permit fails to include any evaluation of greenhouse gas emissions from Desert Rock or the potential environmental impact from such emissions. At the very minimum, EPA must consider emissions of CO2 in the analyses of best available control technology for Desert Rock, which EPA has also failed to do.

Environmental Justice

The Desert Rock project will have disproportionate impacts on the surrounding low income and minority communities. It will likely result in the creation or exacerbation of mercury and ozone hotspots in the surrounding communities. As a federal agency, the EPA is obligated to consider environmental justice impacts prior to issuance of the permits. The EPA has not addressed how Desert Rock Energy Facility complies with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."

Before the permit to Sithe Global Power for the Desert Rock Energy Facility is issued, it is essential that the above concerns are addressed, a public hearing is held in Albuquerque, and the public is fully informed of the resolution of these concerns.

Sincerely,

<u>Environmental Law Society</u>	<u>Native American Law Students Association</u>
<u>Samantha Ruscavage-Barz</u>	<u>Shela Young</u>
<u>President</u>	<u>President</u>
<u>University of New Mexico School of Law</u>	<u>University of New Mexico School of Law</u>

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Vice-President¶
University of New Mexico School of
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Patrick Redmond¶
Treasurer¶
University of New Mexico School of
Law, Environmental Law Society¶
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Kristin Casper¶
Secretary¶
University of New Mexico School of
Law, Environmental Law Society¶

**CORTEZ MONTEZUMA LEAGUE OF WOMEN VOTERS
COMMENTS ON U.S. ENVIRONMENTAL PROTECTION AGENCY
(REGION IX) PROPOSED PREVENTION OF SIGNIFICANT
DETERIORATION PERMIT-DESERT ROCK ENERGY FACILITY
(AS OF 09-25-2006)**

GENERAL:

The public comment period and EPA schedule for the proposed Prevention of Significant Deterioration (PSD) permit is different from the comment period projected for the draft Environment Impact Statement (EIS) and the schedule of compliance under the National Environmental Policy Act of 1969. It is inappropriate for any federal official to make a decision of such importance for residents of the Four Corners when we are unable to read the draft EIS at the same time that we are commenting to the EPA on the proposed PSD permit. The schedules for public involvement of these two items should be synchronized to eliminate this problem and no decision should be made on the PSD until stakeholders can review and comment on the draft EIS.

Monitoring of air quality in southwestern Colorado is inadequate, and does not receive equitable regulatory agency and governmental support that other more prosperous regions of Colorado, such as the Front Range and the I-70 corridor enjoy. The Four Corners area and, specifically, southwestern Colorado face substantial economic development challenges because of our isolation, limited water resources, small population, and high transportation costs.

The three largest business assets this region possesses for addressing these challenges are: 1) our renewable and non-renewable natural resources base; 2) our environmental amenities, including relatively clean air and water and aesthetically pleasing vistas, 3) our unique cultural and historical resources that draw visitors from around the world.

We need sustainable development to support economic activity with our limited business assets. Such development is critically important in isolated, resource-rich regions like ours because it provides business income and the multiplier effect throughout the community. At the same time it protects the environmental amenities that attract people to visit or settle in the region.

Fundamental to protecting the health and vitality of our environmental amenities and renewable natural resources base is to have a monitoring framework for measuring such characteristics as air quality and visibility. All sectors of the local economy and all income groups benefit when we protect our business assets.

Sustainable development in the Four Corners area must find a balance between economic growth and protection of our business assets, including the environment. For example, this balance cannot be achieved if we lack the data collection networks, equipment and expertise for monitoring air quality.

In its assessment of the Desert Rock Facility's effect on ambient air quality in our region, EPA needs to recognize the close relationship between our environmental amenities (e.g. air quality, stable and lasting vistas) and sustainable development for the diverse elements and sectors of the

region. Energy project developments in this region, especially those fired by fossil fuels, need to incorporate a more responsible and participatory industry role in supporting local air quality monitoring.

USE OF BEST AVAILABLE CONTROL TECHNOLOGY IN DESIGN OF THE PROPOSED PSD PERMIT FOR THE DESERT ROCK ENERGY PROJECT

The proposed PSD permit, if finalized through approval by the EPA, will allow Sithe Global Energy to construct two supercritical pulverized coal fired boilers. We believe that supercritical pulverized coal fired boilers do not utilize BACT. This is the same technology that the U.S. power companies have been using since the 1950s and it produces mercury pollution, sulfates and nitrates, atmospheric carbon dioxide, and acid rain.

We believe that Best Available Control Technology can only be achieved at Desert Rock by using a combination of technologies known as the Integrated Gasification Combined Cycle (IGCC) design. Two IGCC plants operate in the U.S. today, one near Tampa, FL and one on the Wabash River in Indiana. We disagree with the EPA decision not to include IGCC as an alternative to a pulverized coal fired boiler, based on a determination that this would be redefining the source. Even if this is true, there is nothing in the EPA Report that explains why redefining the source is not feasible.

In public meetings (2005) on behalf of Sithe's Desert Rock project, there was a promise of 90 percent reduction in mercury emissions. The EPA's Impact report is silent on the subject of mercury. Mercury is not mentioned anywhere in the PSD permit. Though not required at this time (subject to the CAMR), Sithe has reneged on their mercury commitment in the PSD permit provisions.

In addition, since California is targeted as a major power distribution market for Desert Rock, and since the State of California by law can no longer purchase electric power from plants that do not meet California standards, it behooves Sithe to ensure that Desert Rock be as clean as possible in its emissions.

EFFECTS OF THE PROPOSED PERMIT AND DESERT ROCK CONSTRUCTION ON CLASS 1 AREAS

The Clean Air Act provides the legislative basis for the federal government, under oversight of EPA, to provide the highest degree of protection for air quality in Class 1 areas. Class 1 areas in the Four Corners region potentially affected by approval of the proposed PSD permit and construction of the Desert Rock project include the following National Parks: Mesa Verde, Arches, Black Canyon of the Gunnison, Bryce Canyon, Canyonlands, Capitol Reef, Grand Canyon, Great Sand Dunes and Zion. In addition, Bandelier and Petrified Forest National Monuments are required to be afforded Class 1 protection in the region. The La Garita, Pecos and San Pedro Parks and Weminuche, West Elk and Wheeler Peak Wilderness Areas are also required to be given Class 1 protection.

In its air quality impact report EPA concluded that Sithe used appropriate modeling procedures and followed applicable guidelines to demonstrate that the proposed project does not violate any

national Ambient Air Quality Standards (NAAQS) or PSD increment. It also determined that the proposed facility will not have an adverse impact on any air quality related value at any Class 1 Area. We disagree with the EPA's conclusions. Specifically, we believe that the applicant has not shown that its proposed Facility impact is below the Significant Impact level (SIL). We also believe that Sithe has failed to show that there is no violation of NAAQS, using cumulative impact analysis. The modeling results in the impact report are suspect because of the lack of monitoring stations at lower elevations, including agricultural lands. The data we have seen shows that Desert Rock will indeed have adverse affects on Mesa Verde National Park, over and above that admitted in your own Impact Report.

We disagree with the EPA position that it is appropriate to propose approval of the PSD permit before there is agreement among Sithe, federal land managers and the EPA to incorporate Sithe's commitment (within the PSD permit terms and conditions) to perform regarding visibility impacts on Class 1 areas. EPA is not fulfilling its oversight responsibilities under the Clean Air Act by encouraging Sithe and federal land managers come to a "side-agreement", (p. 38, Impact Report) one which would not be federally enforceable under the Clean Air Act and EPA regulatory function. If agreements are not legally enforceable, they do not protect the public interest.

EFFECTS OF THE PROPOSED PERMIT AND DESERT ROCK CONSTRUCTION ON AMBIENT AIR QUALITY

Approval of the proposed PSD permit and construction of the Desert Rock facility will adversely affect visibility in the Four Corners. The visibility of the air over the Montezuma and Mancos Valleys and the clarity of the air to the south looking over the Navajo and Ute Mountain Ute lands is deteriorating. Residents of these areas increasingly observe and comment on the "dirty air". The Desert Rock Facility, as currently proposed, will cause further deterioration in visibility. This fact is ignored in EPA's Ambient Air Quality Impact Report.

On Page 44 of the PSD Report in the last two paragraphs EPA states, "If the 5 percent level of extinction is exceeded on any single day, then additional analysis on visibility is required." In the next paragraph, however, Sithe's alternative analysis concluded, by excluding inclement weather, that the proposed Facility's emissions drop back to less than the 5 percent level of extinction, meaning that no additional analysis on visibility is required.

We believe that this conclusion is incorrect. For example, we believe that over a year's time, there are dozens of days during dry weather in which, say Shiprock from Far View Visitor Center in Mesa Verde National Park, is substantially obscured or invisible due to air pollution, which is unacceptable for a Class 1 area.

Furthermore, by citing an outdated paper from 1980 on vegetation effects of ambient air quality, EPA and Sithe totally ignore contemporary understanding of both nitrogen and wet deposition. Excess nitrogen – out of balance nitrogen – causes invasion of non-native plant species. This poses a threat to native plant species and to agriculture. Lower PH, as would be caused by a significant increase in sulfur dioxide shown by Sithe's own modeling, causes the binding of important minerals in the soil and releases detrimental inorganic aluminum. Therefore, root systems of native species

and agriculture plants would be adversely affected. Vegetation balance is easily disturbed and takes many years to correct in our semi-arid climate.

EFFECTS OF THE PROPOSED PERMIT AND DESERT ROCK CONSTRUCTION ON NATIONAL AMBIENT AIR QUALITY STANDARDS

There is no evidence in the visibility section of the Ambient Air Quality Impact Report that EPA considered or used other modeling data such as that available from the National Park Service Air Resources Division. Thus it appears that only the applicant's (Sithe) modeling data were applied in EPA's "statement of basis and fact".

The League of Women Voters of Cortez Montezuma County asks that the EPA take the following actions:

1. Postpone action on the PSD until stakeholders can review and comment on the Environmental Impact Statement;
2. Require Sithe to fulfill its promise to reduce mercury emissions by 90 percent;
3. Examine other data and models for regional ambient air quality, including those available from the National Park Service Air Resources Division, especially in Class 1 areas;
4. Require Sithe to use the Best Available Control Technology, which is an Integrated Gasification Combined Cycle design; and
5. Require Sithe to provide additional monitoring stations in the Four Corners to assure Desert Rock complies with its permit conditions.

December 14, 2004

Ms. Eloise Chicharello, Director
Navajo Regional Office
Bureau of Indian Affairs
PO Box 1060
Gallup, NM 87305

Dear Ms. Chicharello,

New Mexico seems to be paying the environmental price for a large part of the energy-consuming western United States... far more than its share.

Current baseline values of pollution from all sources in the entire San Juan Basin (including SE Utah and SW Colorado) must be assessed. This should include past and present activities related to the extraction, processing, and consumption of gas, uranium, oil, and coal.

I am concerned about many issues regarding this project. Please include the following:

1. Non fossil fuel alternatives should be addressed in the EIS.
2. The status of energy conservation measures (or lack of) in the western United States should be addressed in the EIS.
3. The current baseline values plus the estimated quantitative values for additional polluting effluents on the grazing lands of the Navajo people due to the Desert Rock Energy Project must be addressed in the EIS.
4. The current baseline values plus the estimated quantitative values for additional pollution to the surface and groundwater resources on the Navajo Nation due to the Desert Rock Energy Project must be addressed in the EIS.
5. The current baseline values plus the estimated quantitative values for additional mercury pollution in the San Juan Basin due to the Desert Rock Energy Project must be addressed in the EIS. Please address birth defects and miscarriage in humans and animals, mental retardation, accumulation of mercury in humans, wildlife, and fish, and the effect of current and proposed mercury pollution levels on the food chain, both wild and domestic.
6. The current baseline values plus the estimated values for additional pollution factors due to the Desert Rock Energy Project for Chaco Canyon, Bisti Wilderness, De-Na-Zin, and the Pueblos must be addressed in the EIS.

Mr. Baker,

Attached is an article that appeared in the Local newspaper, "The Daily Times." It emphasizes the high rate of asthma on the reservation and how respiratory diseases will be perpetuated by the proposed Desert Rock.

My question is: to what extent do people have to suffer before the EPA adheres to the words: "Environmental Protection."

I am directly from the proposed site and most of my family has asthma. It is an absolute SHAME for us to go 'begging' the EPA for protection when your air permit was approved on insignificant data; NO data was used from our area? Why is that?

How does the EPA account for the fact that they can approve Desert Rock when they cannot even regulate the the waste created by Four Corners Power Plant? How is waste to be regulated by another power plant?

My health is in jeopardy because of the EPA air permit approval and I would suggest that if the EPA had any morality beyond seeing this as a 'job', there would be a sincere initiative to protect the well being of myself and others in my community...this means rejecting Desert Rock. There is an already overwhelming amount of articles and people opposing the project.

It does not take scientific evidence to realize that we are suffering from two existing power plants in our vicinity.

Furthermore, it is genocidal to subject an impoverished community to another power plant.

Thanks for your time.

Dailan Jake

Doctor shares concerns about adding another power plant
Staff Writer
Farmington Daily Times
Article Launched: 10/14/2006 12:00:00 AM MDT

— By Lisa Meerts —

The Daily Times

FARMINGTON — An area doctor says he treated five children with asthma attacks so bad he had to fly them out of rural Shiprock to save their lives.

Dr. Marcus Higi, of Cortez, Colo., says he never saw so many people affected so severely by asthma as in the Navajo Nation, where pollution from two power plants wafts in daily.

Meanwhile, residents throughout the Southwest light up their homes. Parts of the region, stretching from New Mexico to California, grew by 66 percent between 1990 and 2000. Without

new power sources for growing markets in Nevada and Arizona, utility companies say the region could experience difficulty powering homes by 2014.

Enter Sithe Global, the Houston-based company that wants to help meet the power need with a third coal-fired power plant in the Four Corners. Called the Desert Rock Power Plant, it would be located outside Burnham on the Navajo Nation — pending approval from the U.S. Environmental Protection Agency (EPA) and Navajo Nation Environmental Protection Agency (NNEPA).

Scientists at the New Mexico Environment Department (NMED) say the plant could emit enough pollutants to risk the public's health despite using some of the best pollution control technology available. They worry additional emissions could raise ozone levels to a breaking point.

Doctors like Higi, who worked in the Navajo Nation for four years, say even a little more pollution is too much.

"I've seen the worst asthma cases out here near the power plants," he said. "A kid would come in, barely breathing. They're basically on the verge of death."

He flew five children to hospitals before their small airways closed for good. He says the price for power is health.

Ozone in San Juan County

The EPA ties respiratory problems like coughing, throat irritation and congestion to ozone and says it can worsen conditions like emphysema, bronchitis and asthma. Inhaled often enough, ozone can cause permanent damage to lung tissue.

Two gases, nitrogen oxide (NO_x) and volatile organic compounds (VOC), combine in a chemical reaction sparked by sunlight to create ozone. Oil and gas development, motor vehicles, coal-fired power plants and other sources emit NO_x and VOC.

"It's a complicated pollutant," said Erik Aaboe, operations manager for the NMED air quality bureau. "Every time someone fills up or drives their car, they put precursors to ozone in the air."

Given enough sunlight, the gases can raise ozone levels enough to sound an alarm. It happened six years ago, when air monitors recorded ozone in San Juan County at levels higher than anywhere else in the state — even traffic-ridden Albuquerque.

Had the ozone level violated federal standards, known as the National Ambient Air Quality Standards (NAAQS), it would have required the NMED to develop a plan to bring the area back to attainment levels.

It would have triggered a federal permitting program for new and modified large industrial sources coupled with strict controls. The economic cost of adding control technology would not be taken into account.

Instead, the region voluntarily entered into an Early Action Compact designed to improve air quality now rather than later. It also prompted the birth of the Four Corners Air Quality Task Force, a group formed from industry representatives, residents and state, tribal and municipal agencies. They meet quarterly to devise ways to reduce emissions, which they will hand over to decision makers in 2007.

Ozone and Desert Rock

When the EPA proposed a draft air permit for the Desert Rock Power Plant, the agency said its NOx and VOC emissions would not harm regional air quality. It never looked at ozone. It wasn't required, said Colleen McKaughan, associate director for the EPA Region 9 air division.

But after hearing harsh words from residents at the public hearings and learning about the Early Action Compact, the agency will revisit the issue. McKaughan said the draft air permit could look quite different after revision.

Once granted, the draft air permit allows Sithe Global to begin construction. The company must later receive a Title V operating permit from the NNEPA. At full build out, Desert Rock will produce 1,500 megawatts of electricity or enough to power about 1.2 million homes annually.

Compared to other sources of NOx and VOC, the Desert Rock Power Plant looks quite good, said Frank Maisano, spokesman for Sithe Global. That was their goal — to develop an environmentally sound project that meets the region's growing power needs.

"No matter what you do, there's going to be an impact somewhere on something," Maisano said.

Recognizing residents' concerns, he pointed to other pollution sources and called them low-hanging fruit. They could easily clean up and improve regional air quality, he said.

The complaints he hears sound aimed at existing sources of NOx, VOC and other emissions, Maisano added. Companies that acted as poor neighbors have forced Sithe Global to step out from behind their blackened reputation and prove its environmental integrity, he said.

Even Higi, who opened a family practice in Cortez this year, admitted the Desert Rock Power Plant could be viewed as the straw that breaks the camel's back rather than the instigator.

"It would be one thing if they were shutting down another power plant and replacing it with a new power plant," he said. "They might have an argument they're making a difference."

But Higi says that is not happening. Instead, he sees another power plant slated to be built in poor, rural American.

Lisa Meerts: lmeerts@daily-times.com

**Charlene Anderson
Ed Mosimann**

11/13/06

308 Highway 170
Farmington, NM 87401
505-326-9139 phone
ed@creativegeckos.com
charlene@creativegeckos.com

By email, pdf

Mr. Robert Baker
Air-3, U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, San Francisco, California 94105
E-mail: baker.robert@epa.gov

Re: Comments for Proposed Desert Rock Energy Facility Clean Air Act Draft Prevention of Significant Deterioration Permit

Dear Mr. Baker,

The Four Corners region is already pollution laden enough. We do not need another coal fired power plant, even if it "clean" compared to our current two plants. Just because the air is not violating any of the national air-quality standards does not mean we need more pollution here. As far as the PSD permit is concerned, EPA must address a number of issues:

- A full evaluation of the EIS. Until there is an accurate, complete plan for the entire facility, including disposal/trucking of waste/ash, then you cannot evaluate the emissions of the project.
- A full and complete public hearing in Farmington, NM, the largest population impacted.
- A full emissions analysis of our area's current AND PROJECTED emissions. Install monitors east and west of the powerplant, on the Navajo Nation and off. Do a complete emissions inventory of current auto emissions with accurate data to reflect our industrial area (this is not the same fleet that is used for EPA's urban analysis, for example there are many diesel trucks here). Take into account the current oil and gas industry emissions, both permitted and unpermitted sources. AND take into account the growth of the gas industry, which is planning on adding another 10,000 plus wells.
- Emissions analysis must combine all EPA regions here (6, 8 and 9).
- Please note that the county has already had high ozone levels, and another powerplant will be adding NOx to the mix and would exacerbate ozone.
- BACT analysis (Best Available Control Technology)--shouldn't Desert Rock have to consider IGCC technology to fulfill BACT evaluation?
- You need to make a thorough analysis of health impacts on people living on and off the Navajo Nation. The state of NM doesn't have thorough studies, the Indian Health Service doesn't have thorough studies! This needs to be analyzed.
- Any agreements to reduce pollution by Sithe with handshake understandings with the National Park Service are NOT enough. If additional pollution reductions are required then that needs to be part of the permit so that it is trackable and enforceable.
- Mercury. It must be contained. Our local rivers and lakes already have mercury advisories. It is unacceptable to allow more Hg emissions.
- Look at entire area cumulatively, not as a point by point pollution source.

Really, this needs thorough analysis, and thorough data collection before moving forward.

Sincerely,

Charlene Anderson
And Edward Mosimann

October 25, 2006

Comment 693

Robert Baker, Air -3
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Hello,

I am writing urging you to not issue an air quality permit to Sithe Global that might allow for the construction of another coal fired power plant in the San Juan Basin of northwestern New Mexico. We already have problems with our air quality, another power plant will make our problems worse, and there is no apparent need for the generated electricity.

The air quality in the Four Corners area is hugely variable. We have good days and we celebrate the crisp clear blue skies. But, we also have many brown days. I live in Mancos, Colorado, a small town in the northern part of the San Juan Basin. Throughout the year, perhaps more so in winter, I can look to the south and see the thick brown air that fills the San Juan River Valley. On bad days this haze envelops the Mancos area and extends northward at least as far as Dolores, Colorado. We assume that the major causes of this haze are the two existing coal fired power plants in San Juan County, New Mexico – is this correct? Do you know?

Here in the Four Corners area we are hesitant to trust the energy industry, and the government, regarding the air we breathe. There are many reasons for this skepticism; here are three:

- In past decades, exposure to nuclear weapons testing and dust from uranium mining has sickened, debilitated, and/or killed thousands of residents
- Remember when astronauts in the Apollo Program said they could see two human constructs from space? They saw the Great Wall in China, and the dark plume from the Four Corners power plants.
- In the past several years, we have been advised not to eat the fish from our rivers and lakes in the San Juan Mountains because of elevated levels of mercury.

The power plant will be dirty and it will be a major regional polluter. It may represent the cleanest coal power technology available in 2006, but it is still just another coal-fired power plant.

I was intrigued when I heard President Bush (your boss) call for zero emission coal fired power plants, so I looked them up. A contract for a commercial zero emission coal fired

power plant is expected in 2007 with construction to begin soon thereafter. Clearly, the cutting edge of coal fired power technology and development is happening elsewhere. It is too bad because perhaps that technology would be appropriate here.

There is no Environmental Impact Statement. Hopefully the EIS will analyze and describe the environmental concerns of the proposed project. Why are you (EPA) considering issuing a permit that will allow increased air pollution before the EIS is written?

Did you consider questions of social justice? Are you required to do so? Does the proposal for a coal-fired power plant in this area take advantage of the depressed economy? Because of local and regional economic conditions, are residents more likely to welcome a project that might provide cash soon, but increased health problems later? I notice that my comments are being sent to the EPA office in San Francisco; could a project like this be permitted in the Bay Area, or would it be considered too dirty for such a dense population?

Hopefully, the EIS will look at two things that I believe should have been considered prior to the issuance of an air quality permit. I think you should have considered (a) whether or not there is a need for this project, and (b) if there are better alternatives.

Will you issue a permit for this project even if there is no demonstrated need for it, and if there are better alternatives.

Thanks

Fred Harden
8501 County Road 40.1
Mancos, Colorado 81328

575 E. 8th Street
Durango, CO 81301
November 13, 2006

Robert Baker
Air-3, U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Baker:

I am writing to comment on the Prevention of Significant Deterioration (PSD) permit for the proposed Desert Rock Power Plant in New Mexico. I write as a scientist and as a Board member (not spokesperson) for the Southwest Colorado Renewable Energy Society and the Sustainability Alliance of Southwest Colorado.

First, I must express my extreme frustration at the deeply flawed process associated with this permit.

- It begins by accepting the choice of pulverized coal-fired boilers, only then addressing the issue whether the plant adopts the best available pollution control technology. The question that should be addressed is whether this is the best available technology from the point of energy efficiency and air pollution, particularly as compared to an Integrated Gasification Combined Cycle plant.
- The most important pollutants have been excluded from review: mercury, apparently because it does not affect air quality – only the health of organisms, including humans, in the downwind food chain – and carbon dioxide, which is not currently under EPA regulation, even though ongoing accumulation of this heat-trapping gas in the atmosphere threatens the entire globe.
- Inexplicably, the PSD permit is being considered before issuance of the Environmental Impact Statement for the project. Perhaps the EPA and the developers have prior access to this document, but the public can scarcely make well-informed comment without it.
- The process seems to ignore the environmental injustice of imposing on residents of the Four Corners region, especially those in the Navajo Nation, the immediate impacts of air pollution for power generated to serve residents hundreds of miles away – who would themselves be outraged if they had to suffer the impacts of their own consumption “in their back yard.”

Going on to the more specific issue of air quality deterioration that may result from the Desert Rock Plant, I offer the following comments.

- If Desert Rock would produce no significant deterioration in the region, that result follows primarily because the plant will reside virtually next door to two of the most polluting power plants in the United States. Desert Rock should be permitted only if the San Juan Generating Station and the Four Corners Power Plant were required to reduce

their emissions of subject pollutants by more than the new emissions from Desert Rock.

- The two sites chosen for evaluating the downwind air quality impact are inadequate for assessing the regional impact. In particular, they fail to include Mesa Verde National Park, one of the Class I areas that already suffers significant degradation in visibility from the nearby power plants. And of course they fail to include the awareness of every resident of this region of the frequent occurrence of poor visibility owing to the existing sources of pollution.
- The evaluation fails to include the significant contributions of non-point oil and gas production sources to the current load of atmospheric pollutants, which already have led to near violation of ozone standards in Farmington, NM.

I believe that Desert Rock represents the adoption of the wrong technology in the wrong place at the wrong time. If it is built, its emissions of conventional pollutants will degrade air quality in this region, very likely for at least two generations; it will exacerbate the already serious problems of mercury deposition especially in the Class I Weminuche Wilderness; and it will become an economic albatross when the United States joins the rest of the world in cutting carbon emissions to mitigate global warming.

Sincerely yours,

Richard E. White

Richard E. White, Ph.D.

To Whom It May Concern:

I understand in commenting during this period of PSD permitting, you cannot consider “emotional” comments, but only those comments specifically on BACT, Determination, Effects of Class One air sheds; and NAAQS.

So I will get my “emotional” sharing out of the way first.

How can an EPA official (Colleen ?) visit this area and declare that our air is so clean, we can absorb more pollution? I drive into Cortez every day and see the thick haze of smog hanging over the valley and concentrating in Towaoc. Sometimes the haze is brown, sometimes it's a dirty white. There are times when I cannot even see Shiprock because of the pollution. The air here is not clean and I would be happy to take Colleen from the EPA on a tour any day of the year. I have not seen a clear air day here since I've moved here 4 years ago.

Given that the San Juan Generating Station and Four Corners Power Plant are well documented as two of the major polluting power plants in the U.S., why does the EPA consider the siting of Desert Rock appropriate? What is being done to document the health impacts on people living within the plume area? How is the EPA monitoring the cumulative impacts of all power plants?

Even though the EPA is operating on outdated regulations and does not require monitoring for Mercury emissions, how does it plan on complying with the Clean Air Mercury Rule (2005) to permanently limit and reduce mercury emissions from coal-fired power plants? Isn't the EPA aware of the mercury health advisories on eating fish from McPhee and Vallecito Reservoirs and Navajo Lake? Why then is it even considering another power plant that will dump even more mercury in that air and water?

I can only assume that the EPA is allowing the high concentration of power plants in the Four Corners region which is degrading public health and quality of life because it is practicing environmental racism. I believe that those who profit from this should be required to live in the thick of the pollution from it. Isn't the EPA required to comply with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” Compliance with Environmental Justice is required for the Air Quality permit, where issues of concern include, “Disproportionate exposure to pollutants, potential health problems (respiratory, heavy metals in fish)” (USEPA Air Quality Impact Report, NSR 4-1-3, AZP 04-01 How can the EPA show that it is in compliance?

With the high number of dirt roads in the area, does the Draft Air Permit plan to take into account non-stationary air quality effects (including projected fugitive dust) associated with the proposed Desert Rock Power Plant? How are the non-stationary and stationary air quality impacts of the Desert Rock Power Plant evaluated cumulatively?

Thank you for hearing my concerns

Julia Hesse

36859 Road P.2

Mancos, CO 81328

Dine' Citizens Against Ruining Our Environment
HC-63, Box 263
Winslow, AZ 86047

September 19, 2006

Mr. Bob Baker, US EPA, Region 9
Air Quality Division
San Francisco, CA

Mr. Enrique Manzanilla, US EPA, Region 9
Air Quality Division
San Francisco, CA

Dear Messrs. Baker and Manzanilla:

During the EPA Clean Air Act Workshop for Desert Rock Energy Power Plant, On September 12, 2006 at Window Rock, AZ I was asked by the facilitator to stop speaking and microphone taken from me when I made a statement. I object to being treated in that way by US EPA personnel. The act by US EPA personnel was improper and a clear violation of my civil rights as a member of the Navajo community. I believe all Navajo tribal members have a right to state their concerns whether they agree with or not agree with the project since the Desert Rock power plant will be built on our land.

The public workshop, as to my understanding, was open to the public and to make a statement in regards to air quality related to the power plant. When I began to address the air pollution from the coal strip mining that will be a mine-mouth feed to the power plant was when I was told to stop and turn the microphone over to the facilitator. I believe I had the right to speak to the air in and around the power plant since the workshop was open to the public and was open for questions and comments when I spoke. I would probably concede to letting this violation slide, if the workshop was press for time and if there were a lot of people in line to speak, but after several calls for questions, I was the only one who raised my hand to speak.

The US Environmental Justice policy and Executive Order was established because of similar treatment of affected community members fighting to be heard by governmental agencies. As a grassroots environmental justice organization, we have been hopeful that change for a cleaner environment would become a reality by creating better work relationship with all governmental agencies. I believe that can only happen if US EPA Region 9 would begin to adhere to Environmental Justice policies.

I request that extension of the workshop be held in Bloomfield, NM and Huerfano, NM and the Clean Air Act hearings be extended to include Farmington, NM and Huerfano, NM where the local people who are most affected by pollution can be given opportunity to have a say on behalf of their community members.

Sincerely,

Anna M. Frazier, Coordinator
Dine' Citizens Against Ruining Our Environment

Opponents of the proposed desert rock coal-fired power plant to be built 30 miles south of Farmington are against the Navajo People, says Frank Maisano, spokesperson for the German Sithe Global based in Houston. Maisano goes on to say that the proposed power plant is about providing economic opportunity for the Navajo People. Opponents of the power plant don't care about them, Maisano suggests. We opponents, then, could be considered by innuendo as racists or selfish.

Goodness. Sithe Global is concerned about economic injustice.

Here's my solution: build the coal-fired power plant in Houston. It's their pet idea. Let them breathe the nitrous oxide and sulfur dioxide. Give them the experience of poisoning their waterways with mercury. Let them suffer potential blindness, kidney failure, heart disease, and severe liver damage. Shame on you Frank Maisano. Shame on you Sithe Global. Shame on you EPA and your K Street corporate Lobbyists.

Dennis Lum
Durango, Colorado

October 17, 2006

Rebecca Rosen (Air – 2)
EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

I was unable to attend the hearing in Farmington, NM on Oct. 5, 2006, regarding the Federal Implementation Plan (FIP) for the Four Corners Power Plant (FCPP) and the Navajo Generating Station (NGS), both located on Navajo Nation land. Judging solely from newspaper accounts, the question of mercury emissions and potential allowances under the so-called Clean Air Mercury Rule (CAMR) was not discussed.

I realize that CAMR may not be a part of the FIP process, but mercury emissions from New Mexico's coal fired power plants are a major concern in southwest Colorado. At present, State agencies are moving to implement CAMR in areas of State jurisdiction in response to EPA's deadline of November 2006. Meanwhile, for FCPP and NGS, presumably under either EPA or Navajo Nation jurisdiction, we have heard nothing regarding mercury emissions allowances. The same goes for the proposed Sithe Global Desert Rock power plant.

Your apparent balkanization of air quality issues may be legal under your regulations, but it is contrary to the public interest and a cause of much confusion and suspicion. In your response please provide appropriate discussions not only of the status of CAMR on Navajo Nation lands but also of other pollutants mentioned in the public testimony, such as ozone and carbon dioxide.

Donald A. Anderson
1625 County Road 500
Bayfield, CO 81122

Dear EPA

Once again the health and well being of citizens of the Four Corners is being jeopardized.

Thanks to the *Bureau of Reclamation* and water politicians, our beloved Animas River may see stream flows reduced to 125cfs (greater than half) during winter months.

Thanks to the *Bureau of Land Management*, our once esthetic pinion-juniper woodlands are being morphed into the “Land of Entrashment” as the floodgates of 10,000 ground-level ozone-emitting, glycol-leaching, poorly regulated gas wells have been approved.

Now you are asking us to absorb the spillover costs of another commercial coal-fired power plant. Life in the Four Corners must be cheap. Let's clean up the air for western power hungry cities like Phoenix and L.A. and call it the "greening of the power grid."

The Coriolis effect ensures those westerly winds will circulate power plant emissions throughout the Four-Corners. Drive to Farmington N.Mexico during an inversion. The yellow-brown haze may contribute to a glorious sunset that might be shared by international visitors at Mesa Verde National Park. Enjoy grilled mercury-laden trout from Navajo Lake. Backpack to the almost pristine Weminuche National Wilderness in South Western Colorado.

Coal is not cheap energy! If the EPA and federal government would remove their corporate blinders and start factoring in environmental and human-health related spillover costs, some of the *renewables* (wind, solar, geo-thermal) could stand a fighting competitive chance. If and when the war in Iraq is over, why not redirect our citizens taxes toward a Manhattan “Energy” project focusing on the world’s future projected consumption of 30 to 40 terrawatts of power. The Asian Haze from China alone will probably make “Desert Rock” emissions seem benign. I do believe we can solve—or at least slow down—global warming. The U.S. could become the leader in carbon sequestering technologies and hydrogen fuel cell research. We **can** turn our “swords into plowshares.”

The cross-cultural citizens of the Four Corners have sacrificed enough. The EPA needs to seriously address the mercury, ozone, CO₂, and uranium issues involved with burning coal. Fuzzy math “pollution credit” transfers will not improve the lives of asthmatic Navajo children living near Shiprock.

EPA, if you have any backbone left, please say no to “Desert Rock.” At least retire one of the old Dinosaur Fossils bellowing cold dust into our atmosphere.

Sincerely,

Ken Stanley
Earth Science Teacher
Aztec, N.Mexico

LIESL DEES
710 W. 27TH, FARMINGTON, NM 87401
505-327-4918 deesmyrs@sisna.com

November 6, 2006

Mr. Robert Baker
Air-3
U.S. Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, California 94105
E-mail: baker.robert@epa.gov

Dear Mr. Baker:

I am writing as a citizen of the Four Corners to voice my concern over EPA's oversight of the proposed Desert Rock energy facility. I understand that the current Draft Prevention of Significant Deterioration (PSD) permit for Sithe Global Power, LLC is but one step in the process for approval of this facility, and that some of my concerns may be addressed by the Draft Environmental Impact Statement being prepared under the Bureau of Indian Affairs.

I have two particular concerns, though, for the EPA. The first is ozone levels. Over the past few years, I have attended meetings of the Four Corners Air Quality Task Force, and have learned of the San Juan County Early Action Compact as the first step in addressing high levels of ozone. It is my understanding that data from this project is expected in late 2006. I strongly urge the EPA to wait for subsequent analysis of this data before granting a permit. Once this data is in, the EPA can then begin to evaluate the connection between ozone and public health, analyzing respiratory disease rates in the Four Corners. EPA's responsibility is protecting U.S. citizens from pollutants from permitted facilities. Having listened to discussions on public health in our area over the past years, it is clear that inadequate data has been utilized by the EPA to determine impacts from air pollution from the proposed Desert Rock energy facility, in addition to emissions from existing coal power plants and other sources in the Four Corners (including natural gas facilities and cars). EPA's failure to understand the ozone problem in the Four Corners is a fatal flaw for the Draft PSD permit for the proposed Desert Rock energy facility.

My second primary concern is environmental justice. I understand that the EPA has legal jurisdiction within the Draft PSD permit to analyze the impact of the proposed project on populations who can least afford to absorb these costs. The proposed Desert Rock energy facility will disproportionately impact the Native American population in the area—a low income population already subject to huge impacts from the existing massive coal-mining and power plant complex in the Four Corners. Having listened to discussions on public health in our area over the past years, it is my understanding that inadequate health data is available (including respiratory disease, cancer, and stroke rates). Once the EPA has public health data on Native American populations, as well as other groups in the area, the EPA will be positioned to begin analysis of what a third coal-fired power plant would do to the communities here. I ask the EPA to include further public health data to evaluate environmental justice issues before granting this permit.

These issues must be resolved before the EPA makes a decision on the PSD permit. I urge the EPA to take the lead in following our nation's guidelines—for the benefit of all of us. I look forward to the EPA's comprehensive role as a cooperating agency in development of the Draft Environmental Impact Statement for the proposed project.

Thank you for your concern and attention on this.

Sincerely,

Liesl Dees

November 10, 2006

Robert Baker, Air-3
U.S. Environmental Protection Agency
75 Hawthorne St.
San Francisco, CA 94105

Dear Mr. Baker:

This is a follow-up to comments I submitted on Oct. 17, 2006 regarding issuance of a PSD permit for the proposed Desert Rock power plant. The extended comment period (to Nov. 13) is a meager bone to throw to the public. What is needed is an indefinite extension until such time as the entire EIS review process mandated by the National Environmental Policy Act is completed.

Some serious questions need to be asked about the timing of the issuance of the EIS. Just who is responsible for the delays in its preparation? The EIS is to be issued by the Bureau of Indian Affairs (BIA) rather than the Environmental Protection Agency. Although the BIA's name will be on the EIS, the document is being prepared by the URS Corporation. I understand that Sithe Global Power is paying this contractor and directing their work.

Since Sithe Global Power controls both the timing of the air permit application and the preparation of the EIS, one must ask the obvious question: are they intentionally delaying EIS preparation in the hope of completing the air permitting process before any draft EIS is issued?

Given this situation, EPA has no reasonable basis for going ahead with the air permitting process; to do so would be a clear violation of the intent of 40 CFR 52.21(s) which mandates coordination with the NEPA process to the maximum extent feasible and reasonable.

Sincerely,

Donald A. Anderson
1625 County Road 500
Bayfield, CO 81122

October 17, 2006

Robert Baker, Air-3
U.S. Environmental Protection Agency
75 Hawthorne St.
San Francisco, CA 94105

Dear Mr. Baker:

I am a retired U.S. Public Health Service commissioned officer now living in southwest Colorado. The last 17 years of my career I was detailed to EPA Region 9 and worked both at 100 California Street and 215 Fremont Street, finally retiring in 1989. For the past several years I have been ashamed to admit that I once worked for EPA. I know that recent EPA actions are not the fault of the thousands of career employees of the agency but rather the result of the leadership that has forced a dreadfully wrong change of direction since January 20, 2001.

The current example of dubious EPA actions concerns the permitting process for the Desert Rock power plant. I do not understand your decision to go ahead with the permit authorizing construction when a draft EIS is not yet available. In reviewing EPA's Air Programs regulations, I note that under 40 CFR 52.21(s) you are required to coordinate your air permit review process and other Federal agency's environmental review responsibilities under NEPA "to the maximum extent feasible and reasonable."

I understand that your regulations require you to take final action on a permit application within one year, but you have already missed this deadline by some 17 months. Given this circumstance it would be clearly in the public interest to accept some further delay until the EIS process is complete. Apparently your decision was to give precedence to a regulation which protects the interests of a private corporation and instead violate a statute (NEPA) which is intended to protect the interests of the public and the environment. Have you forgotten your own name – the Environmental Protection Agency?

The non-availability of even a draft EIS is damaging to the public interest, to EPA's image, and perhaps even to Sithe Global Power's interest. Many of the adverse comments received at the Durango, Colorado, public hearing might have been mitigated by the availability of a draft EIS. Among other issues, I hope that the draft EIS might finally address mercury emissions, which you have thus far refused to discuss, even though it is of critical interest in our area.

In your response to these comments please provide the exact CFR citation for the one year permit decision requirement, and also state whether or not it is clearly based on statutory language. If statutory, please provide the exact citation under the Clean Air Act. With this information in hand we can better judge the appropriateness of EPA's actions to date.

Sincerely,

Donald A. Anderson
1625 County Road 500
Bayfield, CO 81122

7. The current baseline effects plus additional detrimental effects of pollutants on vegetation within the fallout zones at 5 miles, 25 miles, 100 miles, and 150 miles due to the Desert Rock Energy Project must be addressed in the EIS.

8. Serious health problems are already currently reported from Navajos who live west of Farmington where the Desert Rock coal fired power plant will be located. The EIS must include a comprehensive assessment of current health problems as a baseline. The University of New Mexico and New Mexico Department of Health are working on the analysis of the chronic respiratory disease emergency department data to determine the relationship between air pollutants and respiratory health effects. This information or another appropriate related study should be included in the EIS.

9. The current baseline values for air quality components must be measured in the San Juan Basin. Measurements in the San Juan Basin are already in near non-attainment status for ozone. Pollutants other than ozone such as NO_x, VOCs, dust, CO₂, mercury, and specifically, powerplant particulates and fly ash must be measured in various wind conditions and directions, especially along the river corridors since the majority of the population resides in these areas. The EIS should estimate, quantitatively, the additional environmental pollutant load due to the Desert Rock Energy project.

10. The current baseline values for water quality components must be measured in the San Juan Basin. Water quality measurements in the San Juan Basin already exceed mercury limits. In addition to mercury, other pollutants must be measured in the water as a baseline. A quantitative estimate of additional surface water pollution due to the Desert Rock Energy project should be stated in the EIS.

Thank you.

Sincerely,

Kristin Dixon
PO Box 6575
Farmington, NM 87499

October 26, 2006

To: Robert Baker
EPA Region 9
San Francisco, CA

From: David Wegner – 2609 Columbine, Durango, CO 81301

Subject: Comments on Permitting of Desert Rock Energy Facility

General Comments: The proposed project to build a 1,500-megawatt coal-fired power plant has not been justified as needed. Present and predicted needs for power in this region has not been documented nor supported. If this is a project being built on “speculation” the bar by which it is evaluated should take into consideration of how the impacts from the development are distributed. It appears from the literature provided by Sithe that the proposed market for the capacity and energy from Desert Rock is not in the project impact area but instead is far removed. In reality then we are going to reap the results of decreased air, water, health, and ecosystem impacts while those far removed from the area will benefit by the power produced.

Technical Issues:

1. Cumulative Impact Assessment must take into account the impacts of the other coal fired plants in the region. While Desert Rock and EPA make a valid point that they cannot be blamed for other power plants, it is incumbent upon our government to ensure that the addition of any additional power plants do not negatively impact the air and water quality of the air shed region.
2. Air flow patterns and drift of particulates north into Colorado will impact watersheds and species that are removed from the immediate project area. The determination of potential impacts to these watersheds on a seasonal basis was not adequately discussed in the EPA modeling approach. Looking at average conditions does not accurately depict what is likely to occur.
3. Issuing a permit before construction allows the Contractor to avoid follow-through. What incentive is there to do the right thing? The permit should be held “in abeyance” until the company complies with all permit issues including all construction and monitoring and fund establishment requirements.
4. Seasonal impacts of air quality. Winter and summer wind distribution patterns vary in the project area. The differences between seasons, especially the winter seasons when air density is highest and has the greatest potential impact to the populace. Specific seasonal differences should be identified and discussed.
5. Plant should be “Zero Emission” in order to protect the resources and health. Let the company distribute the costs for zero emissions to the

people who purchase the power from Desert Rock. Set a standard and example of what can be done to minimize the impacts to increased particulate matter and CO2 generation.

6. 638 Contracts: Will 638 contracts be utilized in the construction of the proposed Project, and how might 638-contracting drive up Project cost estimates and the ultimate cost of the Project? This has been the case for the Animas La Plata Project where the use of 638 contracts has been used by the Department of Interior to blame the cost of over a 50% increase in project costs. Who will bear the brunt of the extra costs that will inevitably come from the use of 638 contracts?
7. Emissions from another large coal fired power plant in the Basin will result in exceedance of significant impact levels. The cumulative impacts need to be adequately addressed in context of the entire air quality picture of the Southwest.
8. Mercury and other constituents. It is not clear what the combined impacts of particulate fallout from mercury, arsenic, selenium and other elements. The source of coal is the primary driver on these constituents and has not been adequately addressed in regards to short term, long term and cumulative impacts related to burning and distribution.

NEPA Process Issues:

1. EIS Process being handled by BIA. This is of concern due to lack of experience by BIA in handling a large complex NEPA process and having the proper technical expertise in air modeling interpretation to perform an adequate job.
2. Feedback Loops and Permitting Follow-up have not been articulated. Who is going to watch to ensure that Desert Rock follows the law? What will happen if they do not follow the requirements of the permit? Who has the clout to shut them down or make them adhere to their agreements? The government has limited ability due to political constraints.
3. Monitoring Programs Need to be Upfront, Integrated and Funded. A commitment should be guaranteed by establishing an independent fund for monitoring and research. The company can not be trusted to do the monitoring. An independent group should be hired from the environmental fund to perform the scientifically valid monitoring program.
4. Biological Assessment and Opinion. Who will develop the Biological Assessment? The Biological Assessment has to include potential impacts to watersheds and species removed from the Desert Rock site and perform a scientifically credible job in identifying, evaluating and assessing the cumulative and seasonal impacts related to particulate matter and reduced air and water quality.

5. Health Impacts to population? Who will pay for increased problems related to decreased air quality? A fund should be established to cover these costs.
6. Purpose and Need: The purpose and need for the Project have not been adequately analyzed or established.
7. Economic Issues: What percentage of anticipated annual Project revenues will go to Sithe? What percentage of revenues generated will go to the Navajo Nation Power Authority? Of those revenues realized by DPA, what percentage will be tribal and what percentage will go to the non-tribal entities of the DPA?
8. Distribution of Power: Who will make use of the power generated by the Project? How much will be used by Navajo Nation tribal members? How much will be marketed off the reservation? Is there a defined need for this power when there is a surplus of capacity and energy on the market now?
9. Allocation of Costs. Who pays for?: How much of the projected \$6,000,000 cost of the Project (including the cost of water development and delivery) will be borne by Federal taxpayers?
10. Geographic Project Area: The Project Study Area has been arbitrarily restricted and narrowly limited in size. How were the parameters of the Project Study Area defined and who made this determination? The Project Study Area must be expanded to include (at a minimum) the downwind areas of Durango, Colorado and the Albuquerque/Santa Fe, New Mexico corridor.
11. Cumulative Impacts – Health Issues: The individual and cumulative human health impacts attributable to the Basin’s deteriorating regional air quality must be clearly identified. A comprehensive study of cancer rates and associated etiology needs to be conducted in an expanded Project Study Area, and the results need to be published as part of the NEPA process. Other cumulative health impacts associated with current air pollution levels must be identified and assessed. The incidence and relative severity of childhood respiratory illnesses such as asthma must be carefully documented.
12. Water Quality and Ecosystem Impacts: Impacts of the Project to water quality and supply must be fully determined. Sithe has stated that the Project will deplete 4500 AFY of Basin surface water at a rate of 100 percent with zero return flows to the San Juan River. A scientifically valid discussion of Basin water rights and claims to water, settlements and adjudication proceedings must be included in the scoping process. What are the associated potential impacts of the Project to water quality (TDML) and to the endangered fish species’ habitat along the San Juan River? If ground water is to be tapped, to what extent might withdrawals impact cultural and archaeological resources in the Basin?
13. Cumulative Impact – Visibility: An accurate cumulative visibility analysis must be completed and made available to the public. The

- assumptions made in running the models must be identified and addressed in relation to the quality of the modeling efforts.
14. Cumulative Impact – Planned and Proposed Projects: In addition to the Desert Rock Project, the long list of energy development proposals in the Basin includes over 12,000 new coal-bed methane and oil and gas wells, the Peabody Mustang Power Plant, and a Ute Mountain Ute power generation facility. If the Project is properly considered in conjunction with these other new and proposed major sources of air pollution, the result would be significant air quality degradation incompatible with specific provisions and goals of the Clean Air Act.
 15. Environmental Justice: The Navajo population will be directly impacted by the construction of Desert Rock. Any impacts to individual property, health, ability to make a living that are related to the construction and operation of Desert Rock should be compensated. The Navajo Nation should not be the recipient of any funds, individual should be the recipients. An independent and open Trust Fund should be established and funded by the company in concert with the permit to ensure that environmental justice issues are taken seriously.
 16. Unclear how the BIA/EIS process will integrate the EPA permit. By issuance of a permit, it is unlikely that the EIS process will do anything but rubber stamp the permit. To do otherwise would open the BIA and EPA to potential lawsuits from the power company. That said, the intent of the NEPA process to make a non-biased evaluation is violated.

Permit Issues:

1. Should include clauses to ensure that more than minimal monitoring takes place. Monitoring should occur throughout the air shed and be funded by the power company.
2. A transparent and open monitoring process should be developed with annual reports to the people of the air shed. An annual meeting should be included for discussion and dissemination of information throughout the air shed.
3. A science based adaptive management program should be implemented to ensure that if negative results are shown from the monitoring program that changes can be made in real time by the company.
4. A fund should be established to assist in covering health issues related to degraded air and environmental quality. This fund should be set up and maintained independently from the Power Company. The distribution would be based on specific medical evidence that impacts are related to degraded air quality.
5. Monitoring of the power plant operations needs to include documentation of specific tracers that are unique to the Desert Rock facility. Essentially establishing from the beginning a “Desert Rock DNA tracer” that will specifically be related to the facility.

6. Permitting should be based on predicted worst case scenarios rather than average conditions. It is the extremes that impact the populations and ecosystems, not average conditions.
7. Heavy Metal Constituents. There should be monitoring that specifically addresses changes that may occur from the distribution of heavy metal particulate distribution in the impact area.